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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/775,848	02/09/2004	Haixin Yang	EL0542USNA	1063
23906 7590 03/28/2008 E I DU PONT DE NEMOURS AND COMPANY LEGAL PATENT RECORDS CENTER BARLEY MILL PLAZA 25/1122B 4417 LANCASTER PIKE WILMINGTON, DE 19805				
			EXAMINER MCCLENDON, SANZA L	
			ART UNIT 1796	PAPER NUMBER
			NOTIFICATION DATE 03/28/2008	DELIVERY MODE ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

PTO-Legal.PRC@usa.dupont.com

### Office Action Summary

**Application No.**

10/775,848

**Applicant(s)**

YANG, HAIXIN

**Examiner**

Sanza L. McClendon

**Art Unit**

1796

**Period for Reply** -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 14 December 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1, 3-6, 8 and 10-18 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1, 3-6, 8 and 10-18 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SI-108)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Response to Amendment***

1. Please note that the record has changed. The new examiner is Sanza L. McClendon. In response to the Amendment received on December 14, 2007, the examiner has carefully considered the amendments. The examiner acknowledges the cancellation of claims 2, 7, and 9. The claim rejection under 35 U.S.C. § 112, 2nd paragraph for claims 1-6 and 8-18 have been overcome by the amendment and has hereby been withdrawn for consideration.

### ***Response to Arguments***

2. Applicant's arguments filed December 14, 2007 have been fully considered but they are not persuasive. Applicant appears to be relying on the amendment to the claims to overcome the cited rejections. However, it is deemed that Lent et al teaches said particles sizes, per column 7, line 28, and preferably has a median particle size of the filler from about 0.2 to about 2 micron. This overlaps with applicant's D50 of from 0.1 to 1.2. Hirasa et al shows that it is known in ink jet ink composition that pigments having maximum particles size of 5 microns gives stable dispersion and provides stability of the ink jetting performance (page 56). Therefore the combination of Lent and Hirasa et al teach render applicant's claimed particles sizes (D50 and D100) obvious. Grant et al and Kodas et al show that it is obvious to lower the surface tension of a substrate to enhance adhesion of said printing composition and the reduce the spreading of said printed composition (bleeding on substrate). Thus the combination of Lent et al in view of Hirasa et al in further view of Grant et al or in the alternative Kodas et al render the claims obvious. EP 1223201 shows that it is obvious to fire a coated ink composition in order to fuse said ink to a substrate. Thus the combination of Lent et al in view of Hirasa et al in further view of EP 1223201 renders the instant claims obvious in view of the prior art.

Additionally, it is also deemed that De Voeght et al teaches said particles sizes, per column 14, lines 15-20, preferably has a median particle size of the filler from about 0.005 to about 1 micron. This overlaps with applicant's D50 of from 0.1 to 1.2. Hirasa et

al shows that it is known in ink jet ink composition that pigments having maximum particles size of 5 microns gives stable dispersion and provides stability of the ink jetting performance (page 56). Therefore the combination of De Voeght and Hirasa et al teach render applicant's claimed particles sizes (D50 and D100) obvious. Grant et al and Kodas et al show that it is obvious to lower the surface tension of a substrate to enhance adhesion of said printing composition and the reduce the spreading of said printed composition (bleeding on substrate). Thus the combination of De Voeght et al in view of Hirasa et al in further view of Grant et al or in the alternative Kodas et al render the claims obvious. EP 1223201 shows that it is obvious to fire a coated ink composition in order to fuse said ink to a substrate. Thus the combination of De Voeght et al in view of Hirasa et al in further view of EP 1223201 renders the instant claims obvious in view of the prior art.

Lastly, it is also deemed that Hirasa et al teaches said particles sizes, 0.01 to 0.3 microns and a maximum particle size not over 5 micron. This teaching overlaps with applicant's D50 of from 0.1 to 1.2 and D100 of not more than 5 microns. Grant et al and Kodas et al show that it is obvious to lower the surface tension of a substrate to enhance adhesion of said printing composition and the reduce the spreading of said printed composition (bleeding on substrate). Thus the combination of Hirasa et al in view of Valentini et al and Shimura et al in further view of Grant et al or in the alternative Kodas et al render the claims obvious. EP 1223201 shows that it is obvious to fire a coated ink composition in order to fuse said ink to a substrate. Thus the combination of Hirasa et al view of Valentini et al and Shimura et al in further view of EP 1223201 renders the instant claims obvious in view of the prior art.

Please find the combined rejections below. Please note this is a final rejection since there was no new grounds of rejection and because applicant's amendment necessitated the new arrangement of the previously cited art.

### ***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the

subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1, 3-6, 8, 11-13, 15, and 17-18 rejected under 35 U.S.C. 103(a) as being unpatentable over Lent et al (5,837,042) in view of Sasaki et al (7,217,344), Hirasa et al (2003/0166742), EP 1223201, and Grant et al (6,555,205) or Kodas et al (2003/0175411).

Please find the text of this rejection in the previously mailed office action dated 10/19/2007, herein incorporated by reference and combined with the above explanations.

5. Claims 1, 3-6, 8, and 10-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over De Voeght (7,141,104) in view of Hirasa et al (2003/0166742), Shimura et al (4,492,056), Roth et al, EP 1223201 and Grant et al (6,555,205) or Kodas et al (2003/0175411).

Please find the text of this rejection in the previously mailed office action dated 10/19/2007, herein incorporated by reference and combined with the above explanations.

6. Claims 1, 4-6, 8, 11-13, 15 and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hirasa et al (2003/0166742) in view of Valentini et al (2005/0020730), Shimura et al (4,942,056), EP 1223201, and Grant et al (6,555,205) or Kodas et al (2003/0175411).

Please find the text of this rejection in the previously mailed office action dated 10/19/2007, herein incorporated by reference and combined with the above explanations.

### ***Conclusion***

7. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sanza L. McClendon whose telephone number is (571) 272-1074. The examiner can normally be reached on Monday through Friday 7:30-4:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James Seidleck can be reached on (571) 272-1078. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Sanza L McClendon/  
Primary Examiner  
Art Unit 1796

